

ABSTRACT

A wavefront measuring apparatus and a wavefront measuring method are capable of performing optical measurement on a test optical system, including an immersion optical system, with comparable ease of handling to that of the conventional measuring method using a concave member, and substantially independently of reflection that may occur at the surface closest to the test optical system among the surfaces of an optical member for reflecting light exiting from the test optical system. The wavefront measuring apparatus has a light source, a reference light path in which a reference member for producing reference light is disposed, and a test light path in which the test optical system is disposed. A plano-convex optical member with a wall thickness approximately equal to the radius of curvature of a convex surface thereof is disposed in the test light path in such a manner that a plane surface thereof faces toward the test optical system. The space between the test optical system and the plano-convex optical member is filled with a liquid.